



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/660,519	09/12/2000	Leland S. Bloebaum	4015-785	6474

24112 7590 03/26/2004

COATS & BENNETT, PLLC  
P O BOX 5  
RALEIGH, NC 27602

EXAMINER

IQBAL, KHAWAR

ART UNIT	PAPER NUMBER
----------	--------------

2686

DATE MAILED: 03/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/660,519

Applicant(s)

BLOEBAUM ET AL.

Examiner

Khawar Iqbal

Art Unit

2686

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If no period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 28-31 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                                                              |                                                                                        |
|----------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                                  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                                         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>3 and 5</u> . | 6) <input type="checkbox"/> Other: ____                                                |

**DETAILED ACTION**

***Election/Restrictions***

The restriction made during a telephone conversation with Mr. John Owen on 2-13-04 has been withdrawn.

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-31 are rejected under 35 U.S.C. 102(b) as being unpatentable by King et al (6313787).

3. Regarding claim 1 King et al teaches a method of facilitating location detection, comprising (figs. 1,2,12):

storing information relating to position detection assisting devices in a mobile terminal (col. 16, lines 1-25, col. 13, line 60-col. 14, line 29);

referencing said information to determine a subset of the position detection assisting devices which are available from which to determine location (col. 13, line 60-col. 14, line 29, col. 6, lines 20-48) and

requesting contemporary information about said subset from a mobile network (col. 16, lines 1-25, col.8, lines 40-58).

Regarding claim 15 King et al teaches a mobile terminal comprising (figs. 1,2,8,12):

a transceiver (fig.8); and

Art Unit: 2686

a control system operatively connected to said transceiver (fig.8, elements 503,523,527,534), wherein said control system stores information relating to a plurality of position detection assisting devices within a position detection system and solicits contemporary information from a mobile network via said transceiver relating to a subset of said position detection assisting devices (col. 16, lines 1-25, col. 13, line 60-col. 14, line 29).

Regarding claim 21 King et al teaches a communication system comprising (figs. 1,2,8,12):

a server comprising contemporary information relating to a position detection system (col. 2, lines 51-67, col. 16, lines 1-25);

a mobile network (fig.2); and

a mobile terminal communicatively connected to said server through said mobile network, said mobile terminal storing local information relating to the position detection system and soliciting subset of said contemporary information from said server based in part on said local information (col. 16, lines 1-25, col. 13, line 60-col. 14, line 29).

Regarding claim 27 King et al teaches a method of facilitating location detection, comprising (figs. 1,2,12):

storing information relating to position detection assisting devices in a mobile terminal (col. 16, lines 1-25, col. 13, line 60-col. 14, line 29).

referencing said information to determine a subset of the position detection assisting devices which are theoretically visible from which to determine location (col. 13, line 60-col. 14, line 29, col. 6, lines 20-48);

receiving signals from position detection assisting devices which are actually visible to the mobile terminal (col.16, lines 1-32); and

requesting contemporary information about the position detection assisting devices which are actually visible from a mobile network (col. 8, lines 40-58, col. 6, lines 18-33, col. 16, lines 1-32).

Regarding claim 28 King et al teaches a method of facilitating location detection using a satellite based positioning system, comprising (figs. 1,2,12):

securing at a mobile terminal, from a mobile network accurate time, Doppler, and code phase information for satellites that are theoretically available (col. 13, line 60-col. 14, line 29, col. 6, lines 20-48); acquiring a signal from one or more of the satellites that are theoretically available; and requesting ephemeris information only for those satellites previously acquired (col. 13, line 60-col. 14, line 29, col. 6, lines 20-48).

Regarding claim 29 King et al teaches a method of facilitating location detection using a satellite based positioning system, comprising (figs. 1,2,12):

evaluating an almanac within a mobile terminal to determine which satellites are theoretically available based on a coarse location and time of the mobile terminal (col. 8, lines 40-58, col. 6, lines 18-33, col. 16, lines 1-32);

securing at the mobile terminal, from a mobile network accurate time information for satellites that are theoretically available (col.6, lines 20-46, col. 6, lines 18-33, col. 16, lines 1-32);

deriving, at the mobile terminal, Doppler and code phase information for the satellites that are theoretically available (col. 6, lines 18-33, col. 16, lines 1-32);

acquiring a signal from one or more of the satellites that are theoretically available (col. 6, lines 18-33, col. 16, lines 1-32); and

requesting ephemeris information only for those satellites previously acquired (col. 8, lines 40-58, col. 6, lines 18-33, col. 16, lines 1-32).

Regarding claim 2 King et al teaches receiving an inquiry as to the present location of the mobile terminal (col. 8, lines 38-58, col.13, line 60-col. 14, line 29).

Regarding claim 3 King et al teaches wherein receiving an inquiry as to the present location of the mobile terminal originates in the mobile terminal (col. 8, lines 38-58, col.13, line 60-col. 14, line 29).

Regarding claim 4 King et al teaches wherein receiving an inquiry as to the present location of the mobile terminal originates in a mobile network associated with

Art Unit: 2686

the mobile terminal (col. 6, lines 20-47, col. 8, lines 38-58, col.13, line 60-col. 14, line 29).

Regarding claims 5,16,22,30 King et al teaches wherein receiving an inquiry as the present location of the mobile terminal originates in a server communicatively connected to a mobile network associated with the mobile terminal (col. 8, lines 38-58, col.13, line 60-col. 14, line 29, also see above).

Regarding claims 6,17,23 King et al teaches wherein requesting contemporary information about said subset from a mobile network comprises evaluating a time stamp to determine whether the mobile terminal already has contemporary information about one or more position detection assisting devices in said subset (col. 16, lines 1-41, col. 22, lines 20-51, col. 27, lines 40-57).

Regarding claims 7,18,24 and 31 King et al teaches wherein requesting contemporary information comprises requesting contemporary information about only those in said subset about whom contemporary information is not available in the mobile terminal (col. 16, lines 1-41, col. 22, lines 20-51, col. 27, lines 40-57).

Regarding claims 8,19,25 King et al teaches wherein evaluating a time stamp comprises evaluating a time stamp to determine if said time stamp falls within a predetermined threshold (col. 16, lines 1-41, col. 22, lines 20-51, col. 27, lines 40-57).

Regarding claims 9,20,26 King et al teaches wherein evaluating a time stamp to determine if said time stamp falls within a predetermined threshold comprises evaluating if said time stamp is more than four hour old (col. 16, lines 1-41, col. 22, lines 20-51, col. 27, lines 40-57).

Regarding claim 10 King et al teaches wherein requesting contemporary information about said subset from a mobile network comprises requesting contemporary information from a server within the mobile network (col. 8, lines 38-58, col.13, line 60-col. 14, line 29).

Regarding claim 11 King et al teaches wherein requesting contemporary information about said subset from a mobile network comprises requesting contemporary information from a server communicatively connected to said mobile network (col. 8, lines 38-58, col.13, line 60-col. 14, line 29).

Regarding claim 12 King et al teaches receiving the contemporary information at the mobile terminal and locating said mobile terminal based on information received from said subset of position detection assisting devices (col. 6, lines 18-65, col. 16, lines 1-41).

Regarding claim 13 King et al teaches reporting the location of the mobile terminal as determined by said locating step (col. 6, lines 18-65, col. 16, lines 1-41).

Regarding claim 14 King et al teaches wherein referencing said information to determine a subset of the position detection assisting devices which are available comprises determining a subset comprising only the position detection assisting devices necessary and sufficient from which to determine location (col. 6, lines 18-65, col. 16, lines 1-41).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khawar Iqbal whose telephone number is 703-306-3015.


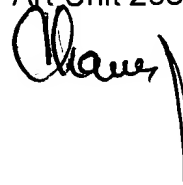
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, MARSHA D BANK-HAROLD can be reached on 703-305-4379. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 09/660,519  
Art Unit: 2686

Page 7

Khawar Iqbal  
Examiner  
Art Unit 2686

  
3/22/04  
**LESTER G. KINCAID**  
**PRIMARY EXAMINER**